

### REMARKS

Applicants have cancelled claims 28-32, which cover non-elected subject matter.

Upon entry of the above amendment, claims 1-27 will be pending and under examination. Applicants respectfully request that the Examiner reconsider this application in view of the following remarks.

#### Rejection under 35 U.S.C. § 103

The Examiner has rejected claims 1, 2, 4-8, and 27 for obviousness on two grounds: (1) claims 1, 2, and 5-8 are rejected over Weidner, US 6,217,877 (Weidner) in view of Sorm, J. Agr. Food Chem. 1971, 19: 1081-1087 (Sorm); and (2) claims 4 and 27 are rejected over Weidner in view of Sorm, and further in view of Tan et al., Nature Review, 2002, 1: 867-881 (Tan). See the Office Action, page 3, line 1 through page 6, line 2. Independent claims 1 and 5 will be discussed first.

Claim 1 covers treating hepatitis C virus infection with a sesquiterpene lactone compound. Claim 5 covers treating hepatitis C virus infection with a sesquiterpene lacton compound featuring  $\gamma$ -lactone fused with a 10-membered ring.

Weidner discloses treating inflammatory or autoimmune diseases with sesquiterpene lacton-containing extracts obtained from plant *Parthenium integrifolium*. Pointing to the paragraph at column 4, lines 5-19 of Weidner, the Examiner asserts that “[this reference teaches that] [t]he therapeutic action of the administration of *Parthenium integrifolium* [] extracts [] is relevant to all known autoimmune diseases, for example hepatitis.” See the Office Action, page 3, lines 16-18; emphasis added.

Applicants have quoted below the most relevant passage from the paragraph referred to by the Examiner:

[t]he therapeutic action [of the extracts] may be relevant to all known autoimmune or inflammatory diseases and the following examples are not limiting with respect to this: Autoimmune hepatitis ... (column 4, lines 15-19; emphasis added).

This passage mentions autoimmune hepatitis, not hepatitis as asserted by the Examiner.

Applicants would like to point out that autoimmune hepatitis is different from hepatitis C. According to the MedlinePlus published by the US National Library of Medicine and the National Institutes of Health, “[a]utoimmune hepatitis is inflammation of the liver caused by immune cells that mistake the liver's normal cells as harmful invaders.” A copy of the relevant webpage is attached hereto as “Exhibit A.” Unlike autoimmune hepatitis, hepatitis C is caused by the hepatitis C virus, not “caused by immune cells that mistake the liver's normal cells as harmful invaders.” Thus, autoimmune hepatitis and hepatitis C result from very different pathological causes. Given the different pathological causes, one skilled in the art would not have been motivated to treat hepatitis C with sesquiterpene lacton, in view of Weidner’s teaching of treating autoimmune hepatitis with sesquiterpene lacton-containing extracts. Further, in view of the different pathological causes, he or she would not have reasonably expected that treating hepatitis C with sesquiterpene lacton would be successful. In short, Weidner does not suggest treating hepatitis C with sesquiterpene lacton.

Sorm and Tan do not cure this deficiency. Sorm discloses a sesquiterpene lacton compound, use of which is among those required by claims 1 and 5, but is entirely silent on its use in treating hepatic C. Tan discloses treating hepatitis C using intron A, which is a protein, not a sesquiterpene lacton compound.

As none of Weidner, Sorm, and Tan teaches or suggests treating hepatitis C with a sesquiterpene lacton, any combination of these three references also fails to do so. In other words, Claims 1 and 5 are not rendered obvious by Weidner, Sorm, and Tan.

For the same reasons set forth above, claims 2 and 4, dependent from claim 1, and claims 6-8 and 27, dependent from claim 5, are also not rendered obvious by these three references.

#### Elected Claims 3 and 9-26

In response to the first restriction requirement dated January 2, 2008, Applicants elected claims 1-27 for prosecution. In response to the second restriction requirement

dated March 18, 2008, Applicants elected as a species treating hepatitis C with a sesquiterpene lacton compound featuring  $\gamma$ -lactone fused with a 10-membered ring. Applicants further pointed out that claims 1, 2, 4-8, and 27 read on this species.

The Examiner conducted search based on the elected species and uncovered Weidner. He rejected claims 1, 2, 4-8, and 27 for obviousness over Weidner in view of Sorm and Tan, two documents cited in Applicants' Information Disclosure Statement. It appears to his position that the combination of these three references renders the elected species obvious. He therefore withdrew from further consideration claims 3 and 9-26, which cover non-elected species.

The law is clear that "should the examiner determine that the elected species is allowable, the examination of the Markush-type claim will be extended [to non-elected species]." See MPEP 803.02. As discussed above, the Examiner errs in relying on Weidner, Sorm, and Tan to reject claims 1, 2, 4-8, and 27, covering the elected species. In short, the elected species is allowable. Based on the above-quoted MPEP guidance, Applicants respectfully request that the Examiner proceed to extend the examination to non-elected species, which are covered by claims 3 and 9-26.

### CONCLUSION

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

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Respectfully submitted,

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